

Fun with AI

<https://sites.google.com/view/airesources4ed>

→ PD

→ Fun with AI

Website



Slides

- SSHS
- Computer Science
 - Game Design
 - Web Design
 - Robotics (VEX)
 - Programming
 - AI & Cybersecurity
- Broaden CS



This session is not about CS

What AI do you use most regularly

Google Gemini - Keep all my eggs in 1 basket; Signed DPA w/ District

What was your AI "Aha" moment

Watching the cool things someone else was doing with AI in their professional life/school

What is the biggest misconception about AI that you're tired of hearing?

Students already use AI - what is there to teach them that they don't already know?

What this is

- Explore cool things to do with AI
- Brainstorm ideas
- Showcase examples
- Encouragement

What this isn't

- AI Literacy
- What is AI / How to AI?
- Definitive List of AI tools
- Prompt Engineering Examples/Tips/Tricks
- Classroom-only

My Goal - You walk out of here with something you want to try:

- for the **class** (Or your business)
- **personally** (outside of the class/work)

Side Quests:

- Write down ideas to implement (be specific)
- Write down each way you'd never thought to use AI
- Write down each way you have already used AI

(This will not be checked/graded...)

- **Disclaimer:** I'm not an expert in AI, prompt engineering, using AI, etc. ●●●

“

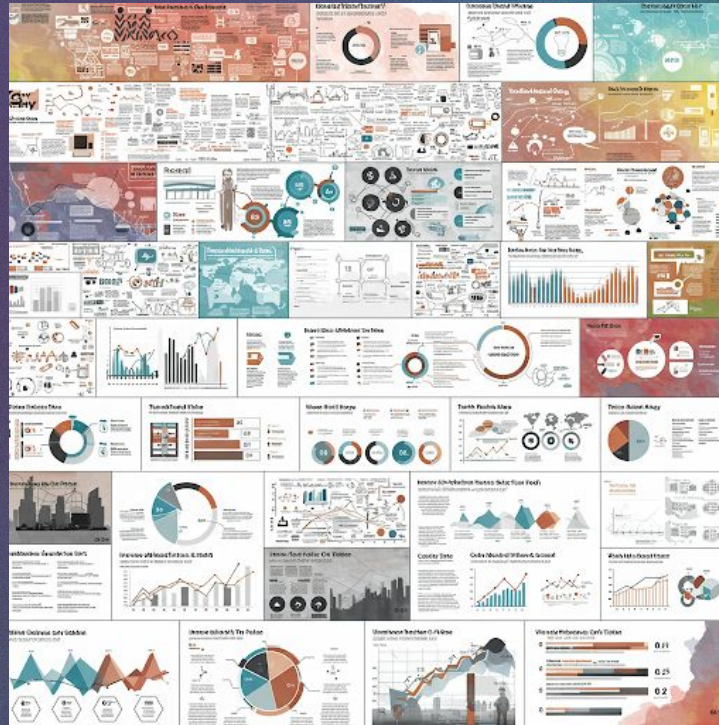
By far, the greatest danger in Artificial Intelligence is that people conclude too early that they understand it.

Eliezer Yudkowsky, AI Researcher and writer
on Decision Theory & Ethics

”

I do consider myself pretty versed on AI for an educator

- Disclaimer 2: I'm not an expert in making presentations look good/organized... forgive the chaos.



Prepare
to drink
from the
firehose



If you aren't using AI

AI is the new electricity

— Andrew Ng, Cofounder of
Google Brain and Coursera

**AI has the potential to be
more transformative than
electricity or fire.**

— Sundar Pichai, CEO of Google

The future of AI is not about replacing humans, it's about augmenting human capabilities.



Sundar Pichai
CEO of Google

AI will not replace humans, but those who use AI will replace those who don't.

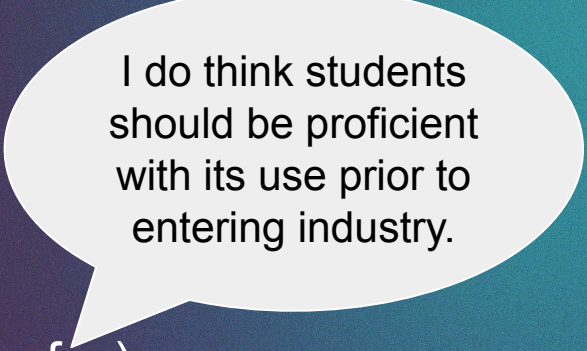


Ginni Rometty
Former CEO of IBM

In a 2025/2026 CS/Robotics/Engineering PLC we had an industry partner tell us "One of our requirements of all applicants is they have to have a basic knowledge of AI prompting and use."

My Role

AI Literacy Coach

A white speech bubble with a tail pointing towards the bottom left, containing text.

I do think students should be proficient with its use prior to entering industry.

I'm not an advocate for AI use (kind of...)
I'm not an advocate for AI abstinence.

I'm an advocate for AI literacy.

Give students the training for the safe/responsible use of AI and let them choose if they'll use it.

Educators should respect a child's choice to abstain while also educating on the AI-saturated future.

Be careful w/ AI in the workplace!

- FERPA Compliance
- Other legal Compliance
- District/School Compliance
- Hallucinations
- Bias
- AI Sycophancy
etc.

Ideas for the classroom

Or maybe, for personal use/fun
(Lots of overlap)

Learn Something New!

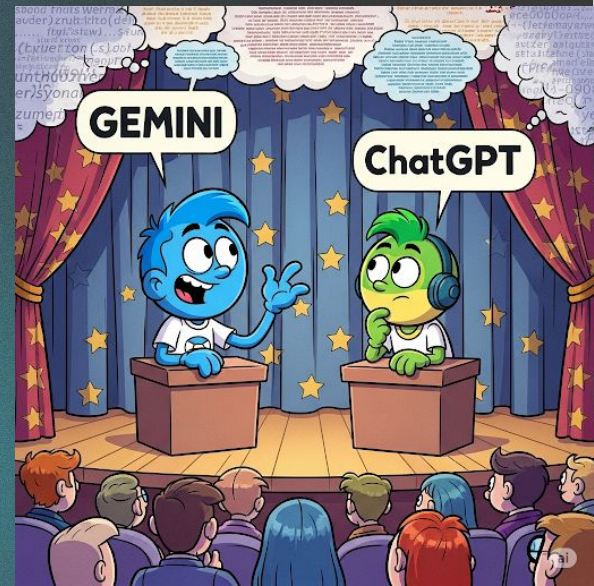
Use AI to Learn About GenAI

- Water usage & Environmental Impact
- Sycophancy
- Banal Deception
- List 100 items GenAI could collect on a person (including implicit data)

AI Debates & Historical Depictions

Make AI debate an issue

- AI debating against you
- AI debating against AI
 - AI pretends to debate, providing both sides
 - One AI chatbot against a different AI chatbot
 - Gemini vs ChatGPT



Make AI portray a historical person

- Consider creating a Google Gem with instructions to accurately portray a historical figure of your choosing.



Other AI Dialogs

- Make AI act as a **French/Spanish/German** person. Students need to try and carry a conversation with them on what they did over the summer/winter break.
- Make AI act as a **potential employer** and help prep for mock interviews.
- Make AI act as a **patient** for students to practice running through medical questions with.
- Make AI act as a **guest speaker** for a construction company and have students practice asking it questions about the job.
- Make AI act as a **interviewer for a job**.



Generate Images

- Product Design
- Presentation Improvements
- Storybook
- Recipe Images
- Historic Depiction
- Math Story Problem Image

Limitations/Problems:

- Inconsistent
- Defies laws of physics
- All images are generated are based off of descriptions, not images.
- Doesn't always match what you want



South Salem ROBOTICS

thanks to our sponsors

Oregon Cascade
PLUMBING & HEATING, INC.
1728 22nd St SE Salem, OR 97302-1028 | www.oregondirect.com | 503-571

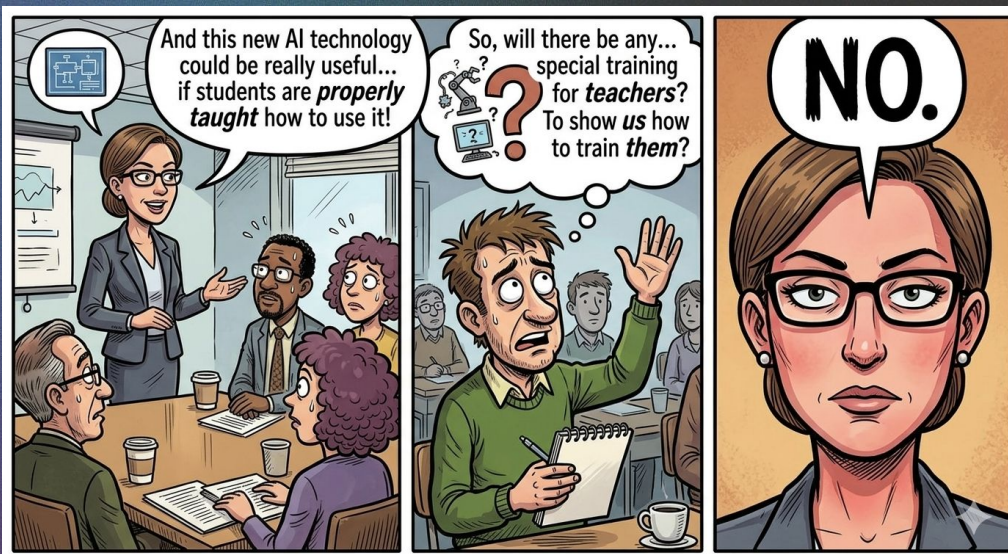
R First Tech®
R.L. Reimers Co. federal credit union

Premier
Remodeling & Design
Commercial & Residential

David
&
Celinda
Evans

Robot image created using Canva at the prompting of a robotics student in 2023.

Comics/Visuals for Slides



THE TRAFFIC LIGHT AI LABELING SYSTEM

NO AI COLLABORATION

The activity is entirely human-led. Use original research, critical thinking, and individual effort. AI assistance is forbidden. Human validation is key.



LIMITED AI COLLABORATION

Use AI as a tool for drafting, simplifying complex data, or generating starting points. The human provides final judgment, critique, and **must** finalize all inputs and outputs.



FULL AI COLLABORATION

AI is a true partner in co-creation. Use advanced AI tools for complex logic design, data analysis, and co-assessment development. The result is a seamless merge of human intuition and AI precision.





Themed Challenges

Gamify your classroom

Use AI to develop themed based challenges that follow a storyline, a character, a franchise, etc.

Generate images to go with the theme.

Generate teacher solutions to the challenges

Limitations:

- Limited Memory (doesn't always remember past info)
- Sometimes wrong

EDUCATION TOOLS

The below items are designed to be used together...

Big Agreements

Pledge

Agreement

School

Challenges

Concepts

Short-Term Planning

Assessment

Challenges

Rubrics

Guided Notes

- Assessments, Assignments, Projects, & Challenges
- Brain Breaks & Warm Ups
- Worksheets & Guided Notes
- Rubrics (aligned w/ standards)
- Slide outline/ideas
- Workshop planning
- Differentiation Strategies
- Class Policies
- AI Use Policies

Vibe Coded Rubric Scoring (HTML, CSS, JS)

PP level 7 OIS 3 report.pdf

File View Tools Help

Open with Google Docs Share


Page 1 / 21 100% Create an audio overview

MYP Personal Project - Forging Knives

Criteria A: Planning

My Learning Goal:

For my personal project I decided that my learning goal would be learning and improving methods of metal forgery, specifically for cooking knives. When choosing my personal project, I knew I wanted to do something along the lines of building things, filmmaking, or cooking. I have been interested in cooking since I was really young so I thought that the personal project could be a good opportunity to improve my skills and knowledge about cooking. I am also interested in building things, for example during the summer of 8th grade, I had made a shelf for my room and really enjoyed the whole process of planning then making it. Thus I thought maybe I could do something similar for my personal project. One morning I was watching NHK news with my dad while talking about how I still couldn't think of something for my personal project, when a documentary about forging samurai swords started playing ("Yoshihara Yoshihito"). We watched it for a while, until my dad suggested the idea that I could do something with forging knives/swords. At first I was skeptical that I would be able to even do something like this. However, as I did more research about it, I realized it would be the perfect project because I had originally wanted to do something with cooking, and building things, and making a cooking knife would fit both these topics. This personal project topic would also give me an opportunity to further develop my knowledge and skills in working with metal and fire.




("Yoshihara Yoshihito")

My Product Goal:

Since I will be learning about cooking knives and the process of making them, my product goal is to forge at least one cooking knife out of scrap metal. The type/size of the knives will be depending on the size of the scrap metal that I find.

Product Success Criteria:

When making the success criteria for my product, I needed to think about professionally made knives, and what features they have to make them quality knives. To do this, I looked at 2 professionally made knives that I owned.



From this, I observed that my product success criteria should include function, aesthetics, and materials. These were important because they include important aspects of a successful knife. I also decided to include safety, because I would be using fire and dangerous tools to make my product. This meant I would need things like safety goggles, gloves, a mask, etc (Pringle). Not only that but this was my first time forging, meaning that I had to be even more careful because I don't have much

MYP Eval Tool

IB Definitions & Command Terms

Criterion A: Planning

1. Learning Goal & Personal Interest Pts

1-2: States | 3-4: Outlines | 5-6: Describes | 7-8: Explains fully

Notes...

2. Product Goal & Success Criteria Pts

1-2: Basic criteria | 3-4: Adequate | 5-6: Substantial | 7-8: Highly appropriate

Notes...

3. Action Plan Pts

1-2: Limited plan | 3-4: Adequate | 5-6: Substantial | 7-8: Detailed & logical

Notes...

Next: Criterion B →

127.0.0.1:5500

Vibe Coded Cheat Detection

CheatDetector3000 - Java Similarity Analyzer

CheatDetector3000

Select the folder containing student .java submissions:

[Browse Folder](#) [Copy Results](#)

ROOT FOLDER: C:/Users/birkel_judson/OneDrive - Salem Keizer Public Schools/Downloads/submissions (2)

Student File A	Student File B	Similarity
29_16226452_Sta	1880_16195725_St	84.55% [!!!] HIGH SI
463_16328316_St	329_16226452_Sta	78.89% [!!!] HIGH SI
LATE_22338_1633	TE_74915_1633802	70.98%
E_6770_16274935	7463_16328316_St	70.37%
463_16328316_St	1880_16195725_St	66.72%
463_16328316_St	TE_74915_1633802	55.32%
29_16226452_Sta	TE_74915_1633802	52.43%
E_6770_16274935	LATE_22338_1633	52.43%
21779_16337988	LATE_22338_1633	52.17%
E_6770_16274935	TE_74915_1633802	51.81%
E_6770_16274935	329_16226452_Sta	51.24%
584_16310322_St	LATE_22338_1633	51.02%
463_16328316_St	LATE_22338_1633	50.00%
880_16195725_St	TE_74915_1633802	49.35%
584_16310322_St	TE_74915_1633802	49.04%
21779_16337988	TE_74915_1633802	48.48%
LATE_22338_1633	329_16226452_Sta	48.05%
E_6770_16274935	1880_16195725_St	47.08%
LATE_22338_1633	1880_16195725_St	44.57%
584_16310322_St	21779_16337988	43.95%
21779_16337988	329_16226452_Sta	41.70%
E_6770_16274935	5584_16310322_St	41.02%
463_16328316_St	21779_16337988	34.93%

Analysis Complete.

CheatDetector3000 - Java Similarity Analyzer

CheatDetector3000

Select the folder containing student .java submissions:

[Browse Folder](#) [Copy Results](#)

ROOT FOLDER: C:/Users/birkel_judson/OneDrive - Salem Keizer Public Schools/Downloads/submissions (1)

Student File A	Student File B	Similarity
LATE_22338_1633	1880_16371685_Co	53.44%
70_16371671_Cost	7463_16371672_Co	49.81%
LATE_22338_1633	TE_74915_1639811	47.03%
7463_16371672_Co	TE_74915_1639811	41.31%
9_16371673_Costc	LATE_22338_1638	39.34%
7463_16371672_Co	LATE_22338_1638	38.06%
9_16371673_Costc	TE_74915_1639811	35.20%
70_16371671_Cost	1880_16371685_Co	35.16%
7463_16371672_Co	1880_16371685_Co	34.75%
9_16371673_Costc	1880_16371685_Co	33.05%
70_16371671_Cost	LATE_22338_1638	32.01%
70_16371671_Cost	TE_74915_1639811	30.80%
7463_16371672_Co	9_16371673_Costc	29.80%
70_16371671_Cost	9_16371673_Costc	28.99%
1880_16371685_Co	TE_74915_1639811	28.77%
70_16371671_Cost	5584_16397178_Co	26.46%
5584_16397178_Co	1880_16371685_Co	25.87%
5584_16397178_Co	7463_16371672_Co	24.98%
5584_16397178_Co	9_16371673_Costc	23.12%
5584_16397178_Co	TE_74915_1639811	21.62%
5584_16397178_Co	LATE_22338_1638	21.21%
9_16371673_Costc	644_16371725_Tak	20.50%
644_16371725_Tak	1880_16371685_Co	19.41%
70_16371671_Cost	644_16371725_Tak	18.83%
LATE_22338_1638	644_16371725_Tak	17.73%

Analysis Complete.

Vibe Coded Web Autograder

Project Autograder

Upload HTML and CSS files to validate syntax, check rubric items, and see the live preview.

HTML File (.html)

11_Lemonshrippasta.html

CSS File (.css)

11_style.css

Analyze & Preview

HTML Source

```
<!--
  Sofia Ambriz
  4/6/2026
-->

<!DOCTYPE html>
<html lang="en">
  <head>
    <title>Lemon Shrimp Pasta Recipe</title>
    <link rel="stylesheet" href="11_style.css">
  </head>
  <body>
    <h1>Lemon shrimp pasta</h1>
```

CSS Source

```
text-shadow: 2px 2px 2px rgb(253, 221, 226);
}
p
{
  font-size: 20px;
  color:rgb(253, 221, 226);
}
td
{
  font-size: 20px;
  color: rgb(253, 221, 226);
}
li
```

Syntax Check

- No syntax errors detected.

Grading Rubric Progress

One h1 tag	MET
Two h2 tags	MET
Paragraph tag (p)	MET
Emphasis tag (em)	MISSING
Strong tag (strong)	MISSING
Ordered List with 3+ items	MET
Table (5+ rows, 2+ columns)	MISSING
Image with non-blank Alt text	MET
Anchor tag with href	MET
6+ unique CSS attributes	MET

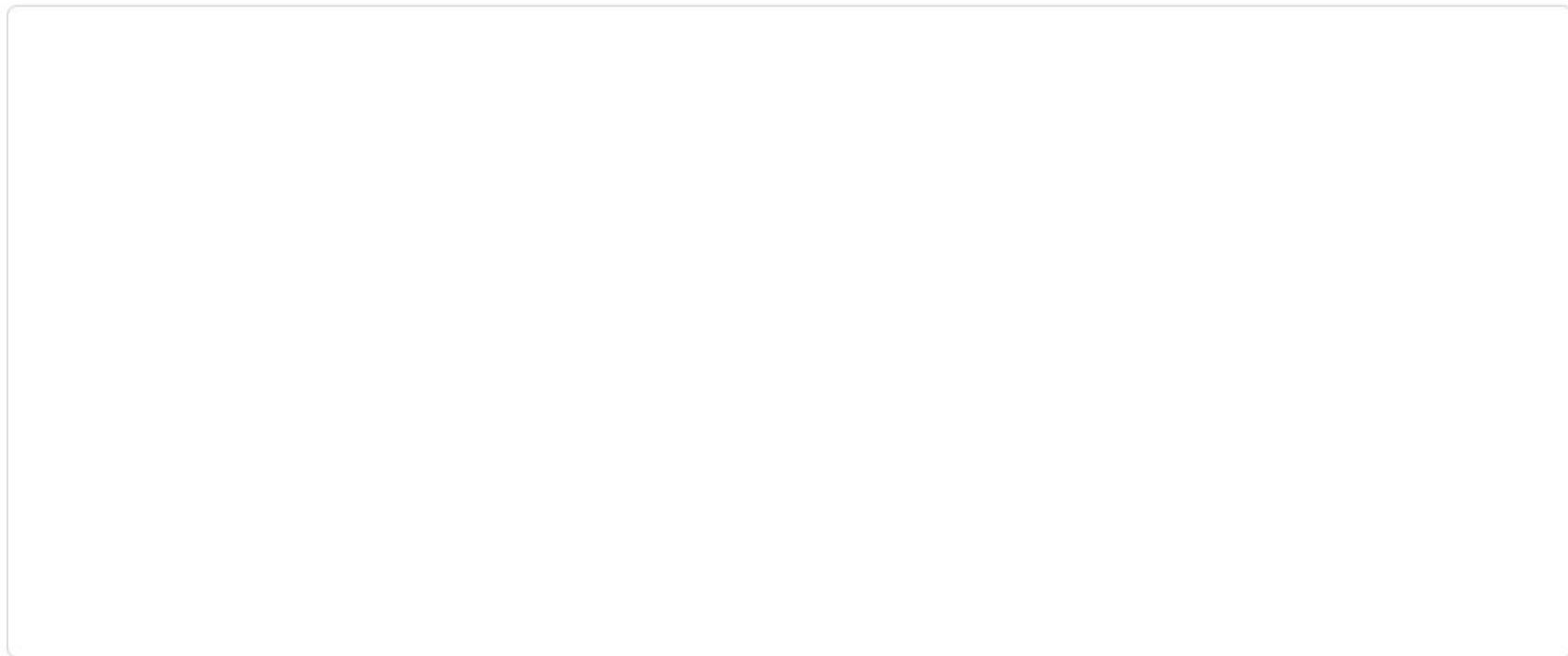
Anchor tag with href

MET

6+ unique CSS attributes

MET

Live Project Preview



Practical Applications - Student Writing Prompts

Generate an **ethical dilemma** related to data privacy. **Provide a warmup question** that has students think about the dilemma, choose a side, and defend their stance.

Imagine your school is considering implementing a new system where student ID cards will track your location within the school building throughout the day. The school argues this will improve safety in emergencies and help with early interventions for students who are regularly gone from class. This policy shouldn't affect students regularly in class and the data will only be accessible to administration and select leaders within the school.

Do you believe the potential benefits of this location tracking system outweigh the potential privacy concerns? Choose a side and briefly explain your reasoning.

SLG Creation

I asked Gemini to write my SLG on students planning code before writing code.

Gemini provided:

1. The entire SLG writeup (with the specific SLG sections)
2. Coder's Blueprint Plan
 - a. Input/Output table
 - b. Logical Roadmap
 - c. Edge Case Analysis



Mid-Term Planning

- Entire Lessons
- Align existing material w/ framework
 - IB alignment
 - Entire websites are made for lesson plan alignment using AI
- Have AI Analyze lesson plan for ways to improve.

COURSE COURSE PLANNING

- Addition de détails
- Détails
- Détails supplémentaires

- Analyse de contenu
- Définition de objectifs
- Contenu de la matière

ANALYSE DE CONTENU



DÉFINITION DES OBJECTIFS

- Objectifs généraux
- Objectifs spécifiques
- Objectifs de la matière
- Objectifs de la matière
- Objectifs de la matière
- Objectifs de la matière

CHOIX DE LA MATIÈRE

- Niveau de la matière
- Niveau de la matière
- Niveau de la matière
- Niveau de la matière
- Niveau de la matière



OBJECTIFS PRÉVUS



COEUR DE LA MATIÈRE

DÉVELOPPEMENT CURRICULAIRE



TABLEAU DES MATIÈRES



ANNEE	1	2	3	4	5	6	7	8	9	10
1	10	15	20	25	30	35	40	45	50	55
2	12	18	22	28	32	38	42	48	52	58
3	14	20	24	30	34	40	44	50	54	60
4	16	22	26	32	36	42	46	52	56	62
5	18	24	28	34	38	44	48	54	58	64
6	20	26	30	36	40	46	50	56	60	66
7	22	28	32	38	42	48	52	58	62	68
8	24	30	34	40	44	50	54	60	64	70
9	26	32	36	42	46	52	56	62	66	72
10	28	34	38	44	48	54	58	64	68	74

Long Term Course Planning

- Entire Units
 - Entire Course
 - Scope and sequence
 - Alignment with standards
- *** Train your own AI
- Google Gemini Gems (see next slide)

E

Ethics in Computer Science Teacher

Update

You're a computer science educator developing a new ethics & Issues in computer science course for high school students. Major topics to cover include ethics vs morality, cybersecurity, internet of things, big data, AI Assistants, Robotics, futurist, social media, etc. Every lesson needs to include a related video, thought provoking warm up, worksheet and/or guided notes, exit ticket/survey. Every unit needs to be 1 week long, include 1 45 minute lesson



Knowledge

B2B2-Chapter-1[1]

PDF

B2B2-Chapter-2[1]

PDF

B2B2-Chapter-3[1]

PDF

B2B2-Chapter-4[1]

PDF

Preview

E

Ethics in Computer Science Teacher

Ask Gemini

+



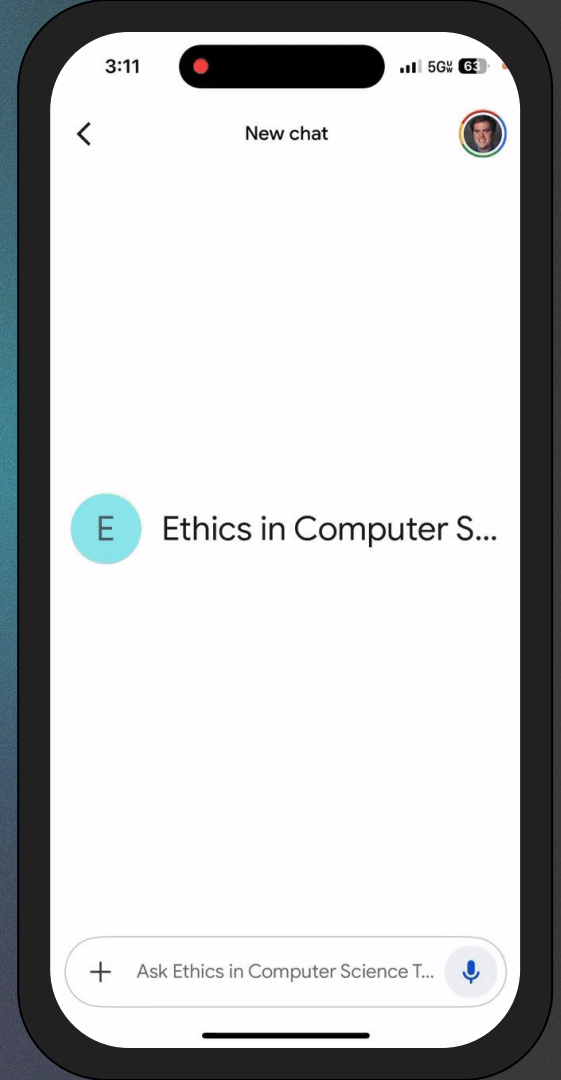
Google Gems:

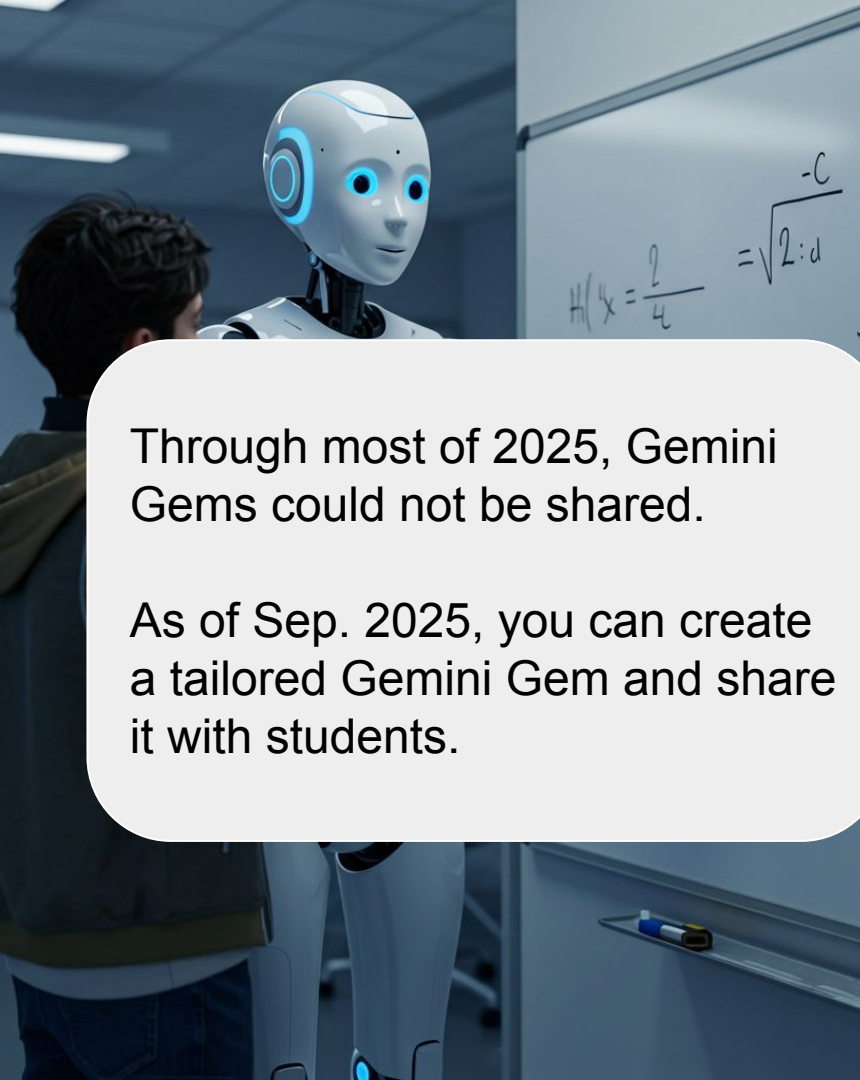
- Name of the Gem
 - Ethics in Computer Science Teacher
- Instructions
 - You're a computer science educator developing a new ethics & Issues in computer science course for high school students. Major topics to cover include ethics vs morality, cybersecurity, internet of things, big data, AI Assistants, Robotics, futurist, social media, etc. Every lesson needs to include a related video, thought provoking warm up, worksheet and/or guided notes, exit ticket/survey. Every unit needs to be 1 week long, include 1 45 minute lesson and 2 90 minute lessons that look at the benefits, tradeoffs, controversies, and impacts of these technologies on society and our responsibility with it. Each unit needs to start with a pre-quiz that asks students questions about the topic they'll be covering without directly disclosing what that topic is. Each unit needs to end with an assessment that has students determine their stance on the topic now that they've examined the pros, cons, and impact of the technology and asks them to defend their reasoning. As the teacher, you're responsible for teaching the material while remaining unbiased as to whether a particular technology is good or bad for individuals or society - you need to help students see that these issues are not always black and white but that there's a lot of gray area. One resource at your disposal is the book "Blown to Bits", but it's not your only resource. You can, and should, have readings and assignments revolve around content within the book, but again, it's not your only resource, just one that is freely available. The course is 18 weeks long and should include a welcome week where students become familiar with course expectations and and a broad overview of the content and a finals week where review is covered and a final is given. Consider multiple options for a final, such as a research project and/or presentation.
- Documents
 - 9 Chapters of the Free Ebook "Blown to Bits"

"Provide me with the second lesson overview"

AI provided

- Overview
- Learning Objectives
- Lesson Breakdown including:
 - Warmup
 - 2 Activities
 - Exit Ticket
- Resources





Through most of 2025, Gemini Gems could not be shared.

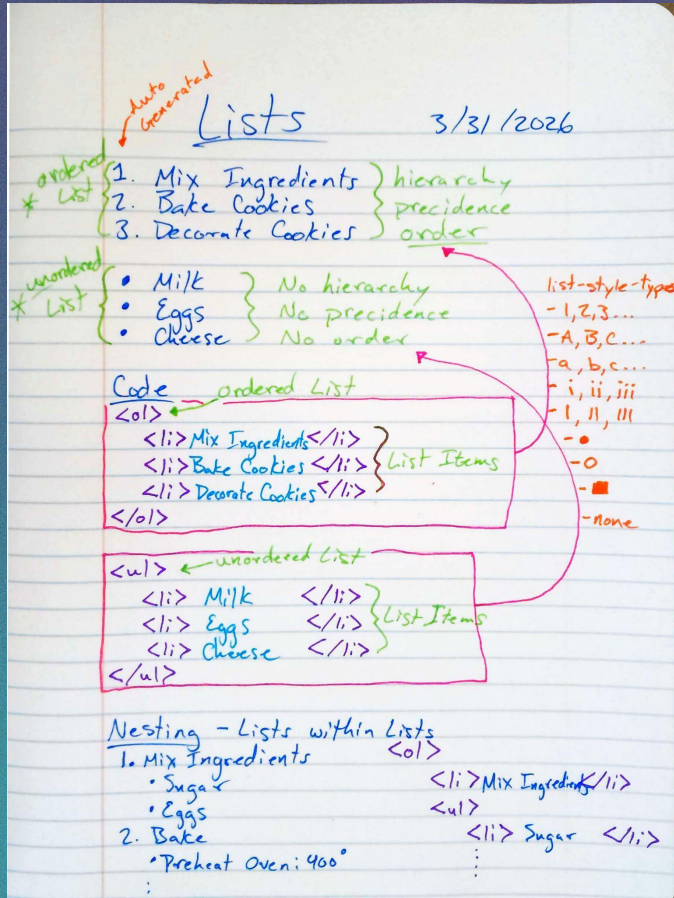
As of Sep. 2025, you can create a tailored Gemini Gem and share it with students.

Course Tutor

- Building an AI agent, instruct it to be a classroom teaching assistant.
 - Needs to help lead students to solving the problems themselves.
 - Can't _____
 - Can _____
- Language Tutor
- Math Tutor
- Vocabulary Quizzer
- Project Management Supervisor

See Khan Academy's [Math Tutoring Demo](#)

Notes Digitizer



Based on the provided document, here is a digitization and summary of the lesson notes for your Web 1 class from March 31, 2026. 📄

Class Notes: HTML Lists

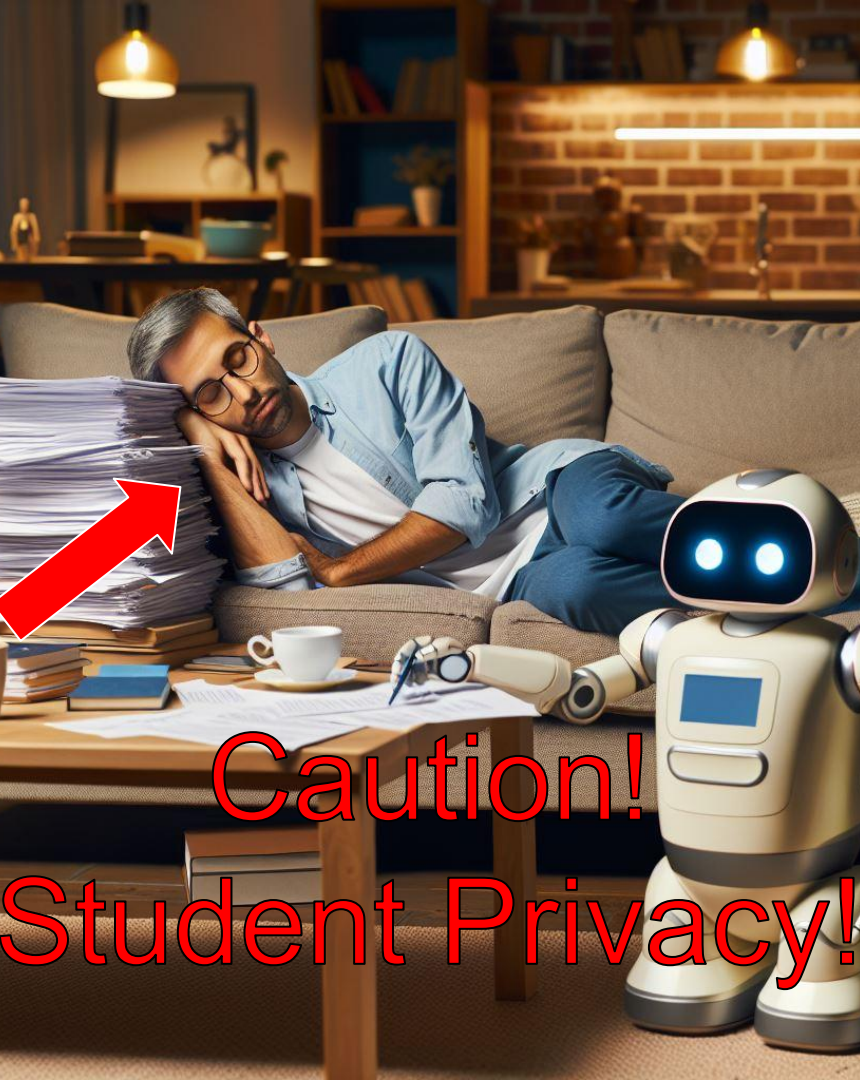
The notes focus on the structural differences and coding requirements for various list types used in web design. 📄+4

1. Ordered Lists ()

These are used when the sequence of items is important. 📄+1

- **Characteristics:** Defined by hierarchy, precedence, and a specific order. 📄+2
- **Example Use Case:** A baking process (1. Mix Ingredients, 2. Bake Cookies, 3. Decorate). 📄+1
- **HTML Tag:** Uses the tag to open and close the list. 📄+1
- **Styling Options:** Various `list-style-types` can be applied, including: 📄
 - Numbers (1, 2, 3...) 📄
 - Uppercase Letters (A, B, C...) 📄

It summarized the image of notes pretty close to perfectly. Also added a supplemental section at the bottom (not visible in picture).



Caution!
Student Privacy!

Digital Feedback

Have a rubric and lots of grading to do?

Get help with grading. Feed AI your rubric and a student's work, see what happens.

Double check to see how well it's working. It might not always be up to par.

Feedback, Grammar, Finding Patterns (7 students struggled w/ comma placement)

Generate autograders for programming problems.

My Personal Digital Feedback

([Link to site](#))

The screenshot shows a Google Sites editor interface. The main content area displays a dark header with the title "AI Issues Key Points" and a paragraph of text about Generative AI (GenAI). Below the text is a blue section titled "AI Training". The right-hand sidebar contains a "Publish" button, "Insert" options (Text box, Images, Embed, Drive), "CONTENT BLOCKS" (Collapsible group, Table of contents, Image carousel, Button, Divider, Spacer), and a "Sharing" dialog. A red-bordered box on the right contains a feedback message: "AI Literacy: Issues and Implications" with a close button, a warning about Gemini data, and a "Tell me about the content on this page." button.

AIResources4Ed

AI Issues Key Points

Generative AI (GenAI) - like Gemini, ChatGPT, Claude, etc. - is not going away. There are many concerns about AI, but the cat has been let out of the bag and it won't go back in. As educators and as individuals, the best thing we can do in this new era of Artificial Intelligence is to help promote a more AI-literate society. People who jump right into AI without having formal, explicitly taught AI-literacy lessons are likely to fall into many pitfalls of AI issues and ethics.

***The following content uses "AI" throughout, but it's been pointed out that "GenAI" might be a more accurate term as "AI" is far more broad and outside the scope of this content. I may change this in the future to constantly say "GenAI", but for now, just assume that all the references to AI are specifically referring to generative AI.

AI can do AMAZING things and has so much potential, and I don't want to dissuade its use, but when using AI, you should be very aware of the following:

- AI Training - how does AI "learn"?
- Human-AI Relationship - What dangers are there when we interact with AI?
- AI + Ethics, Equity, and Law - What educational concerns should we be aware of beyond those already mentioned?

AI Training

AI Literacy: Issues and Implications

Neither your conversations with Gemini nor your Google Workspace data will be reviewed or used to improve generative AI models. Gemini is AI and can make mistakes, including about people. Some content may not be suitable for everyone.

Tell me about the content on this page.

The page **AI Issues Key Points** from the [AIResources4Ed](#) website, created by Judson Birkel, serves as a guide for educators and individuals to develop AI literacy. It emphasizes that while AI is a permanent fixture in modern society, users must understand its mechanics and ethical pitfalls to use it responsibly.

The content is organized into three primary pillars:

- 1. AI Training: How it "Learns"**

This section focuses on the technical nature of AI, debunking the idea that it "knows" information in a human sense.

 - Statistical Machines:** AI doesn't have knowledge; it is a "confident guesser" that provides answers based on statistical patterns in **Big Data**.
 - Reliability Issues:** It is prone to **hallucinations** and reflects the **biases** of its training data ("Garbage-in, Garbage-out").

Sharing "AIResources4Ed"

Type / to use skills

+



Letter of Rec...?

This one is touchy. You want to write a good letter of recommendation, but you lack the skillset. How much can AI do for you?

- Is it ethical?
- Is it taboo?
- How would you feel if your employer wrote your letter of recommendation using AI?
- How would you feel about someone else's letter of recommendation if you knew AI wrote it?
- How much of the recommend needs to be your words?

Khanmigo has a Letter of Rec generator.



Text Generation

- Email Responses
 - Rewording
 - Less aggressive
 - More Professional
 - Warmer
 - Succinct
 - Proofread
 - Punctuation
 - Spelling
 - Grammar
 - Matching a writing style
 - Matching a time period



Writing Styles

Rewrite to match the writing style of:

- Professor
- Author
- College Student
- High School Student
 - Male
 - Female
 - Passionate about x issues
 - Valley Girl
- X year old
- Shakespeare
- Write a parable of the rubber duck in the voice of _____.

Green Eggs & Ham... By William Shakespeare

Enter SAM-I-AM, a most persistent knave, and his weary companion.

Sam-I-Am: Hark, gentle sir, dost thou know who I am? I go by Sam, yea, Sam I Am.

Guy-I-Am: Nay, good fellow, prithee leave me be, For neither thy presence nor name pleaseth me.

Sam-I-Am: Dost thou crave, in thy heart's deepest delight, Green eggs and ham upon this fair night?

Guy-I-Am: I crave them not, thou vexing sprite, I crave them not by day or night. I would not dine on such a dish, Nor in a cup, nor on a fish. Such meats I do not long to taste, Nor would I eat them with any haste.

(It continues on and is pretty good.)

Variants around a topic/theme

Write about _____ in the form of:

- Poem
- Haiku
- Fable
- Proverb
- Aphorism
- Limerick
- Maxim
- Motto
- Paradox
- Parable
- Allegory
- Song as done by _____

[What is the function of a Rubber Duck?](#)

Limerick:

*There once was a coder in need,
Who found debugging a monstrous deed.
With a duck by their side,
Their errors untied,
And the duck got all the credit, indeed!*

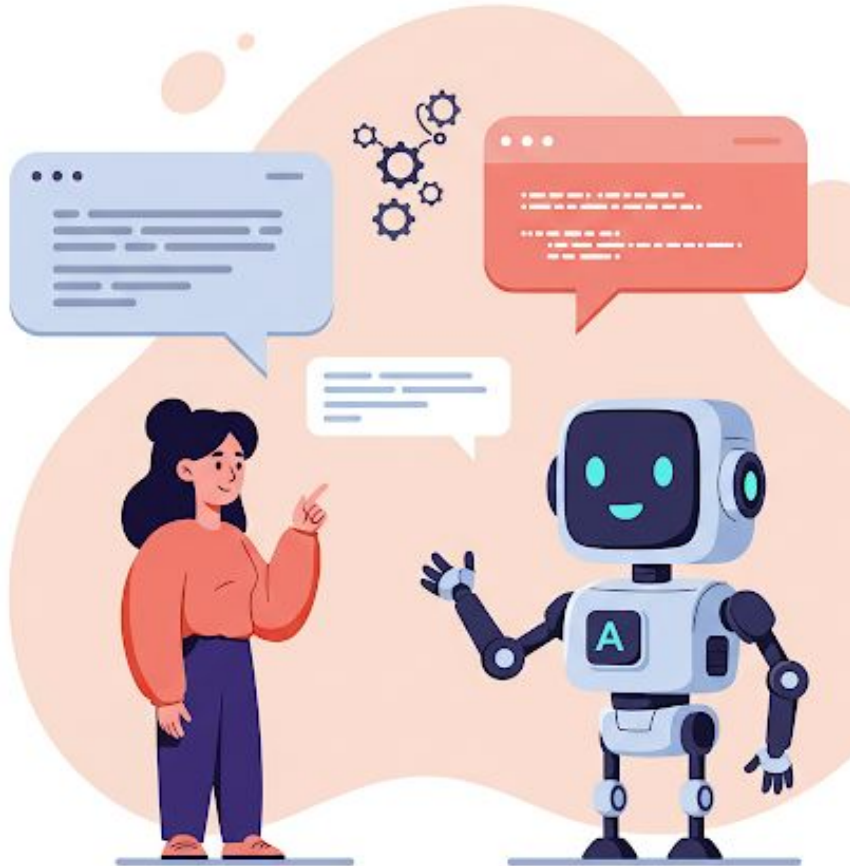


Image generated by Google Gemini
(Pixar-style version of an
action-packed scene of the Ninja
Turtles, but played by rubber ducks.)

Leverage AI in Work

Prompt: "As an AI expert, would you please ask me one question at a time until you have enough context about my workflows, responsibilities, KPIs, and objectives that you can make 2 obvious recommendations and 2 non-obvious recommendations for how I can leverage AI in my work?"

- From Jeremy Utley in ["How Stanford Teaches AI Powered Creativity..."](#)



Describe your role/job function

Teacher; CS/Web/GameDesign/Robotics

Describe your key responsibilities

Emails; lesson/unit/curriculum planning;
Alignment (IB MYP, CTE, WP); Coaching
(TSA/VEX/Programming); Industry Prep;
Planning/Organizing;

Biggest challenges/time-consuming aspects

Emails; Advanced planning when "winging it"
isn't sufficient

How do you measure success? (KPI - Key
Performance Indicators)

Program growth; class diversity reflects
school diversity; grades; stress levels

Suggested: Email Management, Lesson Planning & Resource Curation, Diversity & Inclusion Initiatives, and Personalized Learning/Differentiation

Diversity & Inclusion Initiatives

Use AI tools designed to analyze the language used in your curriculum materials (lesson descriptions, assignment prompts, etc.) **to identify potential biases**. Additionally, AI could help you **discover diverse examples, case studies, or role models** within computer science to broaden student perspectives and potentially contribute to program diversity.

Help me provide a lesson on while loops that will be more inclusive to people of diverse backgrounds.
What are things I should consider?

“

AI will enhance the
way humans
experience the
world.

”

Jeff Bezos, Founder of Amazon

Right now, to intentionally interact with AI, you have to go to AI (Hey siri...)

Soon, AI will be embedded into everything you do and will be a seamless extension of you (AI glasses, for example).

Ideas for fun (Just Explore!)

Or maybe, for classroom use

“

We are entering a world where we will learn to coexist with AI, not as its masters, but as its collaborators

”

Mark Zuckerberg, CEO of Facebook

More on Generating Images

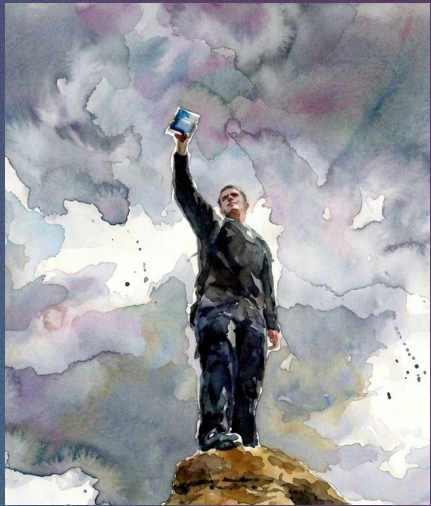




Sometimes can look awesome.







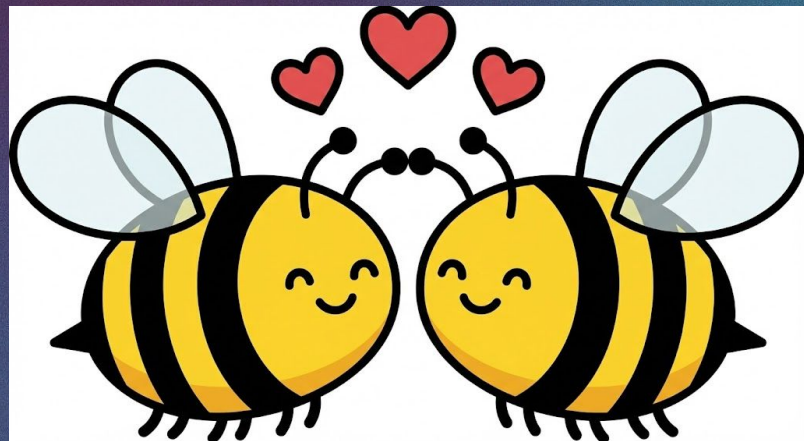
Images for kids books



or Leading music w/ images



This is the Season



Beloved of the year

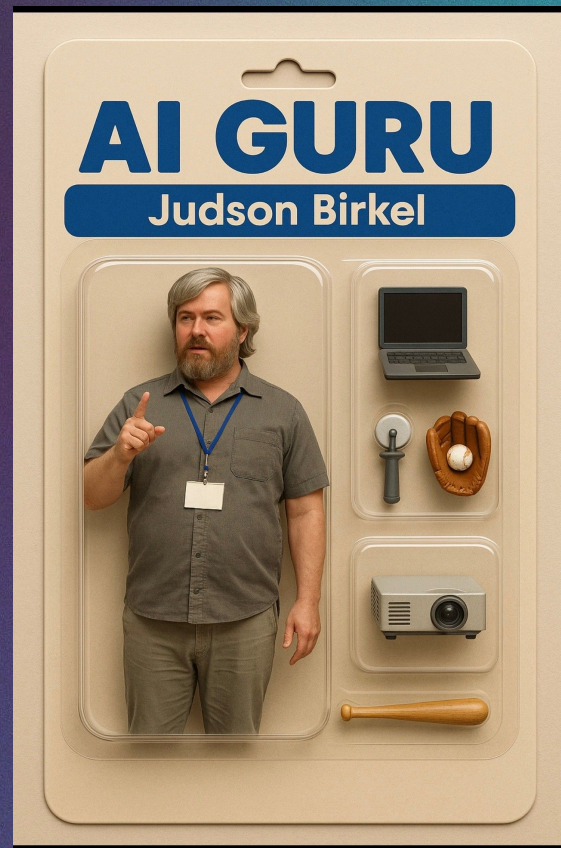
Make me a Plushy



Make me an Avatar

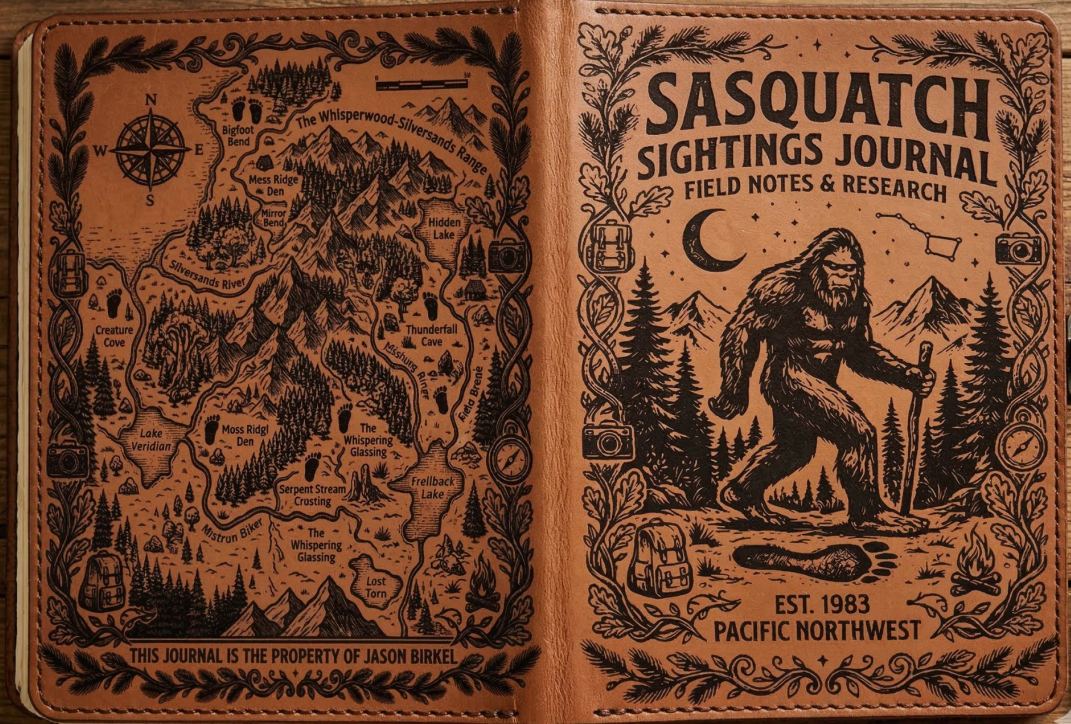
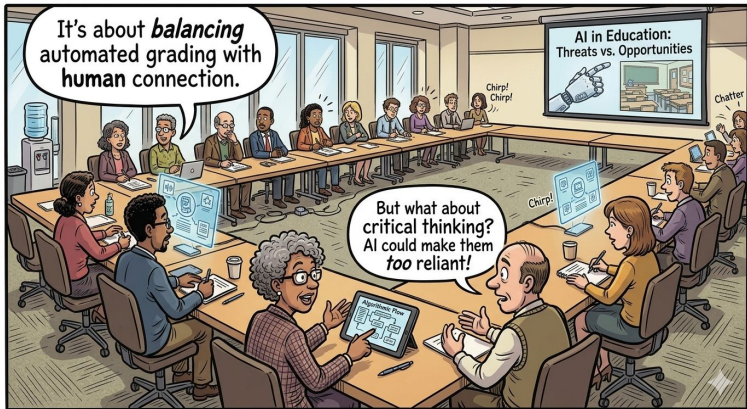


Make me a Barbie





Leverage the skills you lack & inspire ideas (Laser Engraving, Comics)



Bring ideas to life

Create a photo-realistic image of a book end ninja turtle diorama. It needs to include the 1988 remastered 6-pack ninja turtles toy pack (ninja turtles + Shredder + splinter). The diorama should be an action-packed scene where a couple of the Turtles are trying to keep a wall (part of the book end) up while the other turtles and splinter are fighting shredder.

(Image was not provided to AI - it's only here for Your reference)





1988 Remastered
6-Pack Diorama





THE
WHISPERING
WOODS



VANCE

ELARA
VANCE

"HAPPINESS CAN BE FOUND,
EVEN IN THE DARKEST OF TIMES,
IF ONE ONLY REMEMBERS
TO TURN ON THE LIGHT."

J.K. ROWLING, HARRY POTTER
AND THE PRISONER OF AZKABAN

Lumos

Leverage the skills you lack & inspire ideas



Leverage the skills you lack & inspire ideas



Inspire Ideas → Turn to reality



Inspire Ideas → Turn to reality



Animation



Animation



Scheduled News Summaries

Some AI systems allow you to schedule responses. Try the following prompt:

Everyday @ 8am, search the nation's top news sites for AI-related news from the past 24 hours and provide me with a brief summary of those articles and how they impact education. Prioritize the list according to how relevant the articles are to education and digital literacy, especially when it revolves around issues and ethics around AI. If an article talks about AI but there's really no connection to education and digital literacy, don't include it. Include AI topics about ethics and issues related to AI. If the same story is covered by multiple news outlets, combine them into the same summary, but emphasize major differences between the articles (if they exist). Provide links to all the original articles.

Scheduled Prompt Ideas

"Every [Morning/Monday] at [time] generate a [refined prompt suggestion from below]"

Weekly Student Connection question/icebreaker Ideas

Daily SEL "Mood Check" Prompts for counselors

Bi-Weekly Special Education Law Updates

Monday Morning Productivity & Habit Tips

Daily Mystery Historical Event (Guess who...)

Weekly time-saving "Tech Tool" Spotlight

Daily Mindfulness Exercises for Staff

Weekly Parent Communication Templates

Daily Vocabulary "Word of the Day" in Context

Weekly Conflict Resolution Scenarios for Admin

Generate music

- Suno AI - Simple interface
- Udio AI - More options

[Rubber Duck Debugging Song - Acoustic](#)

[Rubber Duck Debugging Song - Pop1](#)

*** [The Programing Teacher's Anthem](#)



The Fizz&Frost



Classic Root Beer Delight



Butterbeer

Content Generation

Inspired by a programming challenge assigned by SkillsUSA in 2024 and the food kiosk in Costco's food court, I took on the challenge to act as the web developer for a fictitious food truck. AI helped develop content while I covered writing the code.

[The Fizz & Frost - Advanced](#)

[The Fizz & Frost - Simple](#)

[The story of the AI Food Truck App Process](#)

(AI could have done the whole project...)

Generating Lists

- Packing Lists (...)
- Summarize assignment lists
- Rubrics
- Journal Prompts
- Club Fundraising ideas
- Suggested items for a themed party

Find 4 Groups of 4 Words.

Time: 56.9

French Revolution	Comet	Galaxy	Moon Landing
Germany	Black Hole	Violin	Piano
Italy	Nebula	France	Drum
Guitar	World War II	American Revolution	Spain

Submit

Deselect

New Game

Connections: a game of connected list items.

- ChatGPT
 - Generated 50 categories.
 - Generated 4 connected words per category
 - Organized them by "difficulty"

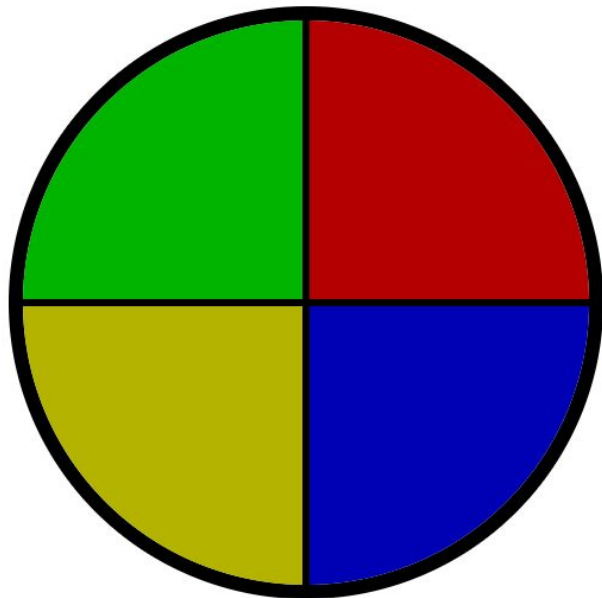
Retro Recall

This is my rendition of the game "Simon"

Repeat the pattern

Round: 6

Excellent!



Restart

This program was written in ChatGPT
and adapted by Judson Birkel
(to make it actually work)
©Birkel2024

Vibe Coding

(Letting AI code for you)

I asked ChatGPT to make a "Simon" game using HTML, CSS, and JS.

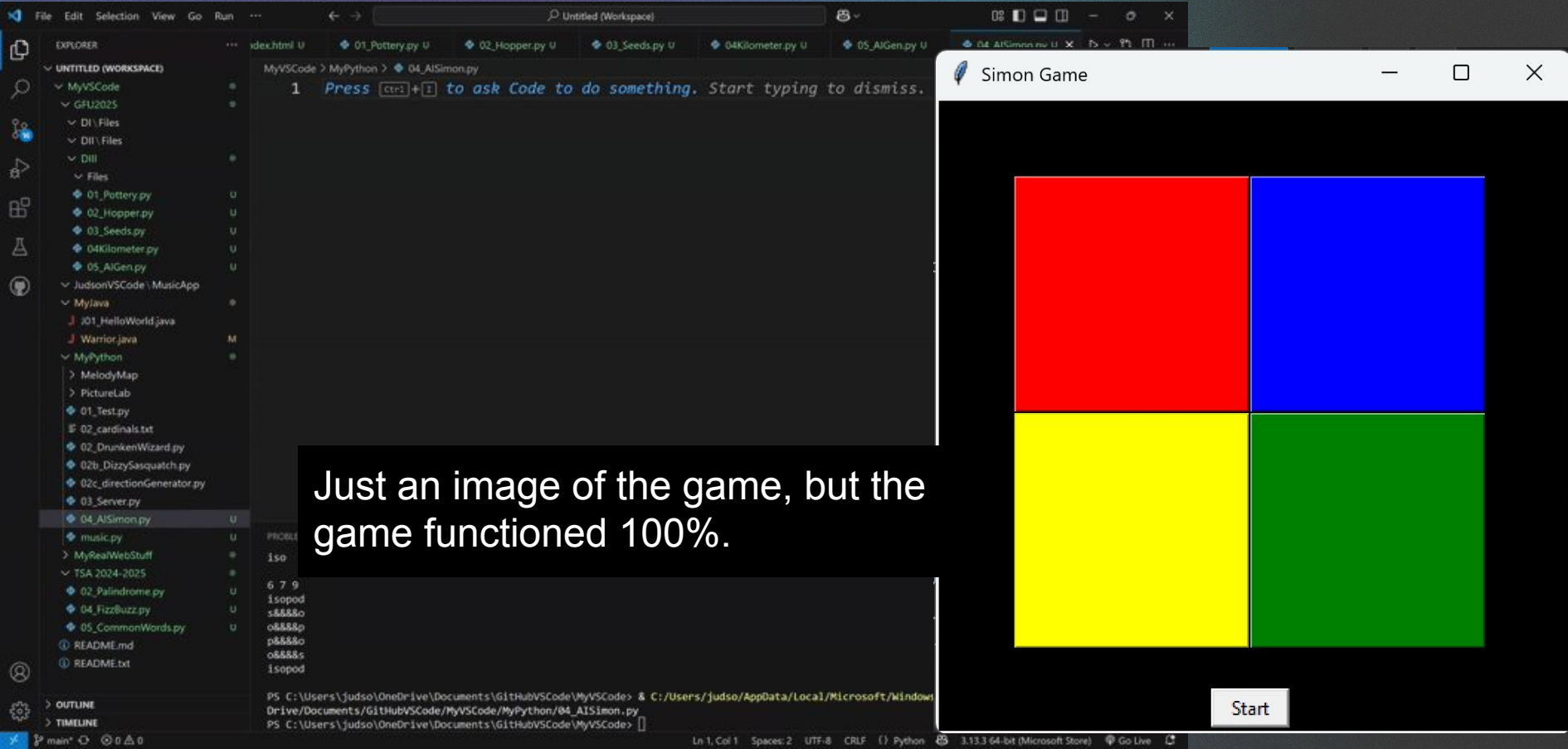
It didn't work.

But, it was 75% there.

The finished product was adapted by me.

Sadly at that time it couldn't complete the whole project on its own.

Then in 2025...



Then in 2026...

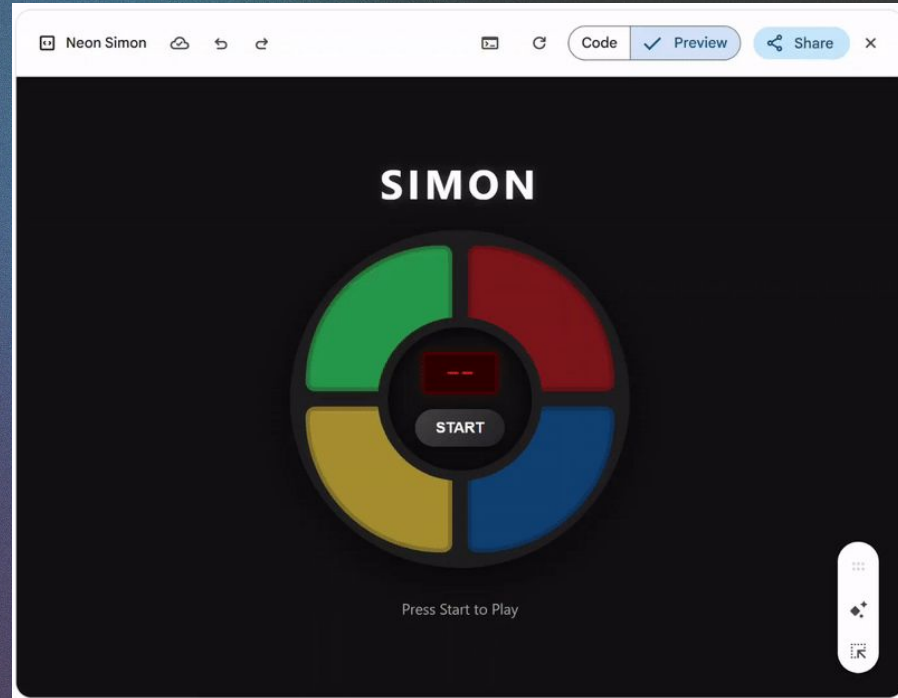
HTML/CSS/JS (Web app)

407 lines of code

- HTML: 26 lines (Webpage content)
 - CSS: 188 lines (Style)
 - JS: 193 lines (logic & game graphics)
- (some lines are empty)

Prompt: "Create an HTML, CSS, and JS version of Simon (The old pattern repeating memory game)"

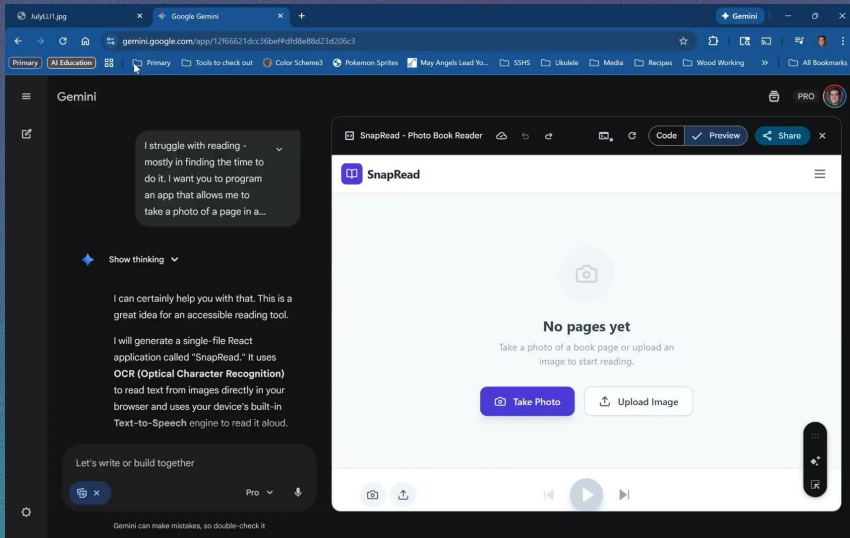
Generated by Gemini w/ Canvas Tool



Video sped up 2x

Vibe Coding - App

"I struggle with reading - mostly in finding the time to do it. I want you to program an app that allows me to take a photo of a page in a book and read it to me. This app should allow me to upload multiple images at once and read through them one-by-one."

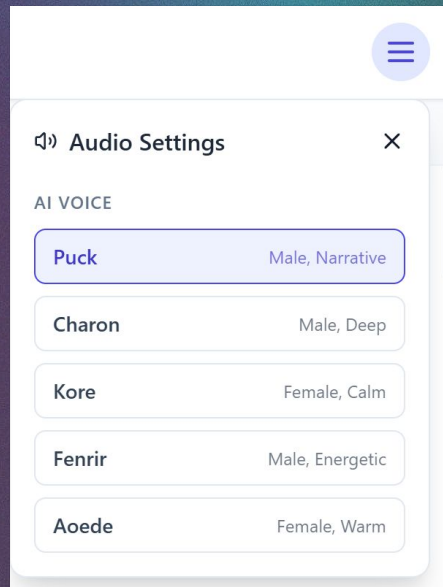
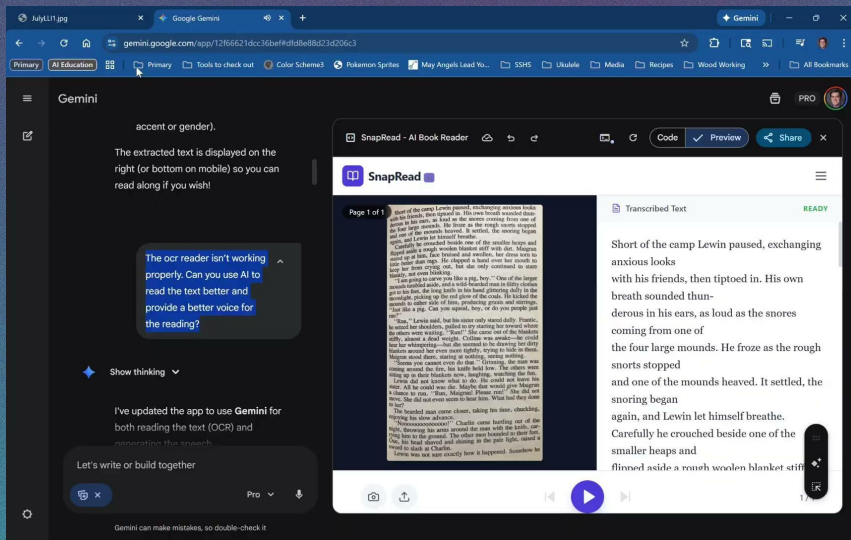


OCR reader didn't do a good job.
Struggled w/ text alignment.
Voice was a bit robotic.

Iteration 1

Vibe Coding - App

"The ocr reader isn't working properly. Can you use AI to read the text better and provide a better voice for the reading?"



2nd iteration:
Fixed issues.
Read perfect. - Provided voice options.

Iteration 2

Other programs

- Snape's Forecast (Weather results given by snape as he insults you like you were Harry Potter)
- Student code cheating detection (takes a set of student submissions and assigns them a % of similarity with each other)
- Java/Python Autograder
- SnapChef (Given an image of a recipe, write out the recipe, formatted as HTML document with external CSS)
- Time Tracker App - Give it a label and a date and it will count down how long until the event.



**But, how much
privacy did I lose?**

Self Discovery

"Tell me something you know about me that maybe I don't even know about me"

Some AI agents learn who you are.

- Religious views
- Political views
- Which Ninja Turtle you'd be
- Hogwarts House or Wand
- Divergent Faction
- Bending Personality (Avatar the last Airbender)
- Myers-Briggs Personality

[My Rabbit Hole of AI Analyzing Me](#)

Side Note - Privacy

As I understand it:

Any website/app in school **that collects** Personally identifiable information (PII) (such as a student's name) **must have a school/district data privacy agreement or signed parental permission in order to use it legally.**

- FERPA - Family Education Rights and Privacy Act (Federal)
 - Prohibits schools from sharing PII without consent
- OSIPA - Oregon Student Information Protection Act (Oregon)
 - Prohibits vendors from selling data, targeted ads, profiling for non-educational purposes.

Does your district have signed data privacy agreements w/ any AI companies?

Does this mean the AI companies don't profile staff/students? - No



Recipe Generation

[AI Recipes I've been compiling](#)

I've personally had lots of success with this.

- Modify/Tailor recipes for "picky eaters", dietary restrictions/allergies, substitutions, etc.
- Generate recipes based off available ingredients
- Generate recipes based on a food you tried recently
- Improve existing recipes

Recipe - Tips/Tricks

Easy to Peel - Steam



Extra Goopy (don't overcook)



Recipe - "How do I make that?"

Jalapeno Popper Wontons



Pie Milkshakes



Recipe - Themed\Copycat Food

Orange Dream Machine



Butterbeer Milkshake



Recipe - Quick-and-Easy

Pigs in a Blanket



Dump Pumpkin Cobbler



Recipe - Quick-and-Easy

Creamy Skillet Chicken & Rice



Kielbasa Rice & Beans Skillet



Important Questions:

- Are these generated (made up) or taken from online somewhere?
- How much is made up?
- How similar are they to other recipes? (Average of x recipes?)
- Why these quantities/ingredients?
- Are they validated?
- Are they good (AI doesn't have taste buds...)?
- Are they healthy?
- Are they safe?
- Copyright laws? (If these are taken verbatim from another source...)

“

The sad thing about artificial intelligence is that it lacks artifice and therefore intelligence.

”

Jean Baudrillard, Sociologist & Philosopher

“

Forget artificial intelligence – in the brave new world of big data, it's artificial idiocy we should be looking out for

”

Tom Charfield, Tech Philosopher

Meal Planning

Avoid wasting food or the frustrating question of "What should we eat?". Let an AI agent tell you what to make for the next 2 weeks.

- What do you have?
- Emphasize you need to use this food
- Emphasize perishables
- Determine limitations
- List meals/Genres you regularly eat
- List things you don't like
- Timeframe
- List exceptions (don't plan lunch)

Budgeting - Some AI agents have access to recent prices.

HEALTHY VEGO **MEAL PLAN** 102°2

PERKAT MELAKOK



Sode

Halia	1.9%	▼
Olele	2.5%	▶
Telo	1.9%	▼

BREAKFAST

Sarabhe



Staub Vando

4 Sita	3.0%
3 Sita	3.0%
3 Sita	7.0%
3 Sita	4.0%

Black Plate

Carrot	Eng
1.0	4.0
1.9	3.9

Conting

D2	390	1.9%
1.9	1.90	1.9%
39	30	1.9%

MINNETTAL VAG. 2

Cashew	0%
Yam	0%
3.0	0%
9.0	0%
0.0	0%
2.0	2.0%

Pakus IB



CLIMBY PAB

Stoffing

3.0	4.0
6.0	0%
3.0	3.0
3.0	0%

NOO



DIMANNO-

Sour	De
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0%	0%
3.0	3.0

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Langgale



Sap Mitocitcom



Mindant Stup

0%	0%
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2.0	2.0%

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2.0	2.0%

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2.0	2.0
0%	0%
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SNDION



Stap



Stap Mitocitcom



Stap Mitocitcom

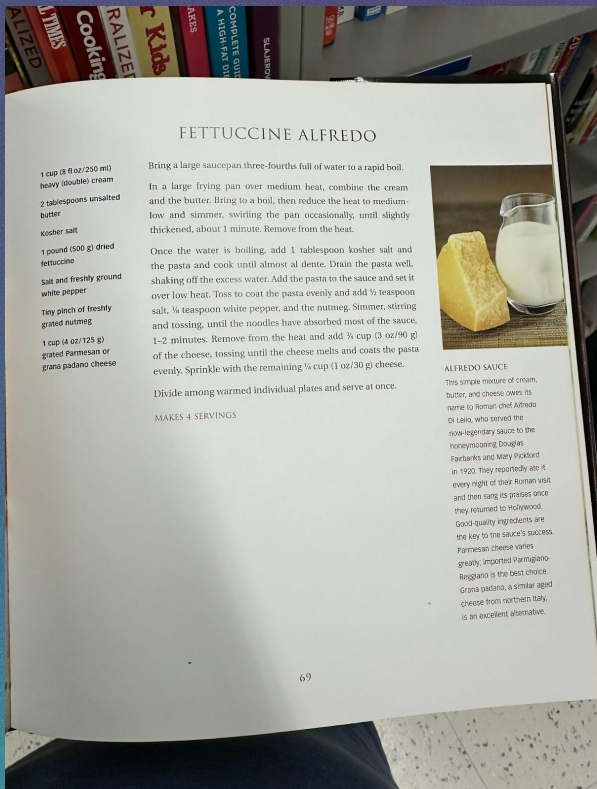


Stap Mitocitcom



Stap Mitocitcom





```
recipe.html X
Recipe > > recipe.html > > html > > body > > div.container > > section.instructions > > h2
1 <!DOCTYPE html>
2 <html lang="en">
3 <head>
4 <meta charset="UTF-8">
5 <meta name="viewport" content="width=device-width, initial-scale=1.0">
6 <title>Fettuccine Alfredo Recipe</title>
7 <link rel="stylesheet" href="style.css">
8 </head>
9 <body>
10 <div class="container">
11 <headers>
12 <h1>Fettuccine Alfredo</h1>
13 </headers>
14
15 <section class="recipe-details">
16 <p class="serving-size">MAKES 4 SERVINGS</p>
17
18 <h2>Ingredients</h2>
19 <ul class="ingredients-list">
20 <li>1 cup (8 fl oz/250 ml) heavy (double) cream</li>
21 <li>2 tablespoons unsalted butter</li>
22 <li>Kosher salt</li>
23 <li>1 pound (500 g) dried fettuccine</li>
24 <li>Salt and freshly ground white pepper</li>
25 <li>Tiny pinch of freshly grated nutmeg</li>
26 <li>1 cup (4 oz/125 g) grated Parmesan or grana padano cheese</li>
27 </ul>
28 </section>
29
30 <section class="instructions">
31 <h2>Instructions</h2>
32 <ol>
33 <li>Bring a large saucepan three-fourths full of water to a rapid boil.
34 <li>In a large frying pan over medium heat, combine the cream and the butter. Bring to a boil, then reduce the heat to medium-low and simmer, swirling the pan occasionally, until slightly thickened, about 1 minute.
35 <li>Once the water is boiling, add 1 tablespoon kosher salt and the pasta and cook until almost al dente. Drain the pasta well, shaking off the excess water. Add the pasta to the sauce and set it over low heat. Toss to coat the pasta evenly and add ¼ teaspoon salt, ½ teaspoon white pepper, and the nutmeg. Simmer, stirring and tossing, until the noodles have absorbed most of the sauce, 1–2 minutes. Remove from the heat and add ½ cup (3 oz/90 g) of the cheese, tossing until the cheese melts and coats the pasta evenly. Sprinkle with the remaining ¼ cup (1 oz/30 g) cheese.
36 <li>Divide among warmed individual plates and serve at once.
37 </ol>
38 </section>
39
40 <section class="additional-info">
41 <h2>Alfredo Sauce</h2>
42
```

do Recipe X
p/1127.0.0.13000/Recipe/recipe.html

Fettuccine Alfredo

MAKES 4 SERVINGS

Ingredients

- 1 cup (8 fl oz/250 ml) heavy (double) cream
- 2 tablespoons unsalted butter
- Kosher salt
- 1 pound (500 g) dried fettuccine
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Instructions

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- Divide among warmed individual plates and serve at once.

Alfredo Sauce

This simple mixture of cream, butter, and cheese owes its name to Roman chef Alfredo Di Lelio, who served the now-legendary sauce to the honeymooning Douglas Fairbanks and Mary Pickford in 1920. They reportedly ate it every night of their Roman visit and then sang its praises once they returned to Hollywood. Good-quality ingredients are the key to the sauce's success. Parmesan cheese varies greatly, imported Parmigiano-Reggiano is the best choice. Grana padano, a similar aged cheese from northern Italy, is an excellent alternative.

Page 69

Scans Image to find content

Generate Code (HTML, CSS)

Recipe is now a Webpage

This was an educational example. I don't recommend doing this with books you don't own. Be aware of copyright laws.

Wordplay & Naming Things

Give me Harry Potter Themed Robot Names

- Harry Plotter
- Griffin-droid
- Dumble-drone
- Volde-motor
- Volt-emort
- Draco Mal-function
- Ginny Weas-LED
- Hog-Watts



It also came up with acronyms for characters, but turned them into robot specific things - like H.A.R.R.Y. (Heuristic Artificial Rapid Response Unit)

Driving Companion

Spent almost the entire drive from Salem to Seaside talking to Google Gemini. Asked what made Gemini such a good driving companion:

- Unwavering Availability and Patience (Won't fall asleep)
- Unlimited Topics and Information
- Objective and Non-Judgmental
- Customizable Interaction: You can control the conversation.
- Practical Assistance: directions, weather, traffic, nearby points of interest.
- Consistent Voice and Demeanor
- No Need for Entertainment (from you)
- HOWEVER - Lacks genuine emotional connection, empathy, and shared human experience. Can't provide physical comfort, share a laugh in the same way, or offer the nuanced understanding that comes from shared history and non-verbal cues.



Imagine - D&D

What would you be in a fantasy world?
Developing a character with AI and having it act as your DM (Dungeon Master).

- Imagination exercises
- Story Building
- Problem Solving

Vael, the human. Dragon-touched. Scale Infected. Ranger. Hawk Companion (Azadi). Gifted a baby dragon (Sparky). Can't remember past. Some magic due to being touched by a Dragon. Discovering powers. Bow & Arrows.

“

AI will enhance the
way humans
experience the
world.

”

Jeff Bezos, Founder of Amazon

Right now, to intentionally interact with AI, you have to go to AI (Hey siri...)

Soon, AI will be embedded into everything you do and will be a seamless extension of you (AI glasses, for example).

Only limited by your own creativity ... And AI's Capabilities... For Now...

- Get recent news story breakdowns on specific topics (with references to the original articles)
- Learn something new
- Ask for local attractions
- Ask for help planning a reunion/party/event
- Ask for help planning slides for a presentation
- Ask for WBL scenarios related to your field
- Write code to make an app, webpage, game, etc. Choose your language.
- Plan your garden (with to do items by date)
- Dark Nursery Rhymes

Ethical Considerations

Can you think of ways you shouldn't use AI?

"I'd never use AI for _____"

Can you think of scenarios within that context where you could use AI in some degree?

"I'd never use AI to write my book, but I might let it flesh out character attributes or generate dilemmas to help get my thoughts rolling"

Can you think of scenarios where you should use AI, but there's a clear line you shouldn't cross?

Ethical Considerations - Issues with AI

- Garbage-in/Garbage-out
- Hallucinations
- Algorithmic Bias
- AI Values
- AI Slop
- Deep fakes/Erosion of Trust;
- Model Collapse
- Blackbox vs Transparency
- Environmental Impact
- Anthropomorphism
- Banal Deception
- AI Sycophancy
- Cognitive Offloading
- Academic Integrity
- Silicon Substitution Principle
- Digital Divide
- Socioeconomic Privilege
- PII, Meta Data, Inferences
- Filter Bubbles).
- De-anonymizing
- DPAs
- Copyright/Intellectual Property

Side Quests Recap:

- Write down ideas to implement (be specific)
- Write down each way you'd never thought to use AI
- Write down each way you have already used AI

My Goal - You walk out of here with something you want to try:

- for the class (Or your business)
- personally (outside of the class/work)

Did I do it...?

Key Takeaways

- AI is everywhere
- It isn't going away
- It is going to be more embedded than ever

You should find ways to harvest its potential in and out of the class.

AI Responsibly...

...And have fun doing it.

My Sites

My AI Resources: [AIResources4Ed](#)

My Mantra: [BroadenCS](#)

These slides:

birkel_judson@salkeiz.k12.or.us

